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# **Environmental Assessment**

STB Finance Docket No. 34117

Pemiscot County Port Authority Construction Exemption Pemiscot County, Missouri

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# **Summary and Conclusions**

The Surface Transportation Board's Section of Environmental Analysis has prepared this Environmental Assessment (EA) in response to a petition filed by the Pemiscot County Port Authority. The petition seeks an exemption under 49 USC 10502 from the prior approval requirements of 49 USC 10901 for authority to construct and operate a rail line between Hayti, Missouri and the Pemiscot Port. The EA identifies the natural and man-made resources in the area of the proposed rail line and analyzes the potential impacts of the rail line construction and operation on these resources.

Based on the information provided from all sources to date and its independent analysis, SEA preliminarily concludes that construction and operation of the proposed rail line would have no significant environmental impacts if the Board imposes and the Pemiscot County Port Authority implements the recommended mitigation measures set forth in this EA. Therefore, an environmental impact statement process is unnecessary in this proceeding.

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# ENVIRONMENTAL ASSESSMENT GLOSSARY

**BN** Burlington Northern Railroad Company

**BNSF** Burlington Northern and Santa Fe Railway Company

**CEQ** Council on Environmental Quality

**Corps** The U.S. Army Corps of Engineers – Memphis District

**DNR** The State of Missouri's Department of Natural Resources

**DOT** United States Department of Transportation

**EA** Environmental Assessment

**EPA** U.S. Environmental Protection Agency

**FFPA** Farmland Protection Policy Act

**FRA** Federal Railroad Administration

**MoDOT** Missouri Department of Transportation

**NAAQS** National Ambient Air Quality Standards

**National Register** National Register of Historic Places, created by the National Historic

Preservation Act of 1966

**NEPA** National Environmental Policy Act of 1969, as amended

NRCS U.S. Department of Agriculture's Natural Resources Conservation

Service, formerly known as the Soil Conversation Service or SCS

**NRHP** National Register of Historic Places

**PAM** Public Affairs Management, SEA's independent third-party

environmental consultant

**PDEA** Preliminary Draft Environmental Assessment

**Port Authority** Pemiscot County Port Authority

Proposed Action Pemiscot County Port Authority's proposal to construct and operate a

new rail line between the town of Hayti, Missouri and the Pemiscot Port

**RECD** U.S. Department of Agriculture's Rural Economic and Community

Development office

**RPO** Regional planning organization (the Bootheel Regional Planning and

Economic Development Commission is the RPO for Pemiscot County)

**ROW** Right-of-way

**SEA** Section of Environmental Analysis of the STB

**SHPO** State Historic Preservation Officer

**STB (or "the** Surface Transportation Board

Board")

**USGS** U.S. Geological Survey

#### **EXECUTIVE SUMMARY**

The Surface Transportation Board's (Board) Section of Environmental Analysis (SEA) has prepared this Environmental Assessment (EA) in response to a petition filed by the Pemiscot County Port Authority (Port Authority) or Applicant. The petition seeks an exemption under 49 USC 10502 from the prior approval requirements of 49 USC 10901 for authority to construct and operate a rail line between Hayti, Missouri and Pemiscot Port in southeast Missouri. In a decision served July 2, 2002, the Board found, subject to consideration of the environmental impacts, that the Applicant met the transportation-related standards of 49 U.S.C. 10502 to construct the proposed action. However, in its decision, the Board explained that the project could not receive final approval until the environmental review process required under NEPA and related laws is completed and the Board has the opportunity to fully assess the potential environmental effects of the project. The Board made clear in its decision that it would issue a final decision on the entire proposed project following completion of the environmental review process and that no construction could begin until a final decision approving the construction is issued and has become effective.

#### ES 1.0 THE PROPOSED ACTION

The proposed action is the construction of a rail line on existing and new right-of-way (ROW) from the Burlington Northern and Santa Fe (BNSF) track in Hayti, MO, to the Pemiscot County Port Authority site for the purpose of providing rail service to existing and future businesses located at the port (see Figure ES-1). Trains on the rail line would move mixed freight including fertilizer, grains, and fiberglass and metal goods. The proposed action includes rail operations on the proposed line. The proposed action also represents the Port Authority's preferred alternative.

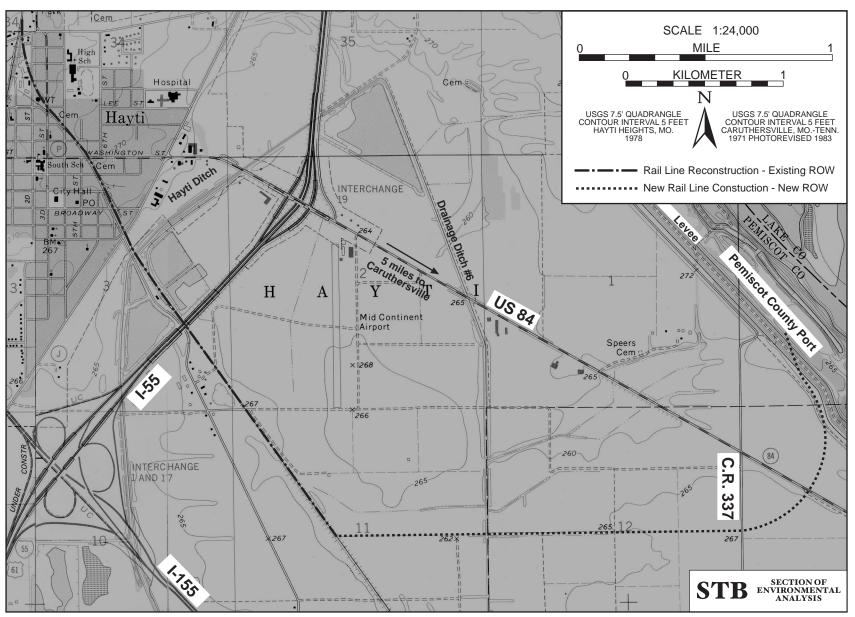


Figure ES-1. Proposed Action

#### ES 2.0 PRIOR ACTIVITIES

The Port Authority began rail reconstruction activities in 1997 along 2 miles of the existing rail right-of-way that it had purchased in 1994 from Burlington Northern Railroad Company, BNSF's predecessor. The Port Authority conducted these activities without realizing that prior Board authorization was required. The Port Authority re-graded the existing ROW, laid new ties, ballast, and rail, and built a new trestle to carry the line over a drainage ditch. The Port Authority was advised of the need for Board approval, and immediately suspended construction, contacted the Board, and filed a petition (as referenced, above) for the necessary review and approval. Upon favorable review, the Port Authority would complete the construction phases of work and undertake such work to enable trains to operate over the entire railway. If the Board denies the exemption in its final decision, the Port Authority would not be authorized to complete construction or operate the rail line. If denied, the Port Authority would also be required to remove the portions of the rail line already constructed.

#### ES 3.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of the proposed action is to develop rail facilities for the Port Authority in order to service existing and future shippers based at the Pemiscot County Port. The proposed rail line would connect in Hayti, MO, with an existing BNSF rail line.

The Port Authority intends to construct the rail line in four phases. Phases 1 and 2 would involve the reconstruction of approximately 12,000 feet of an abandoned rail line on a ROW formerly owned by the predecessor to the BNSF. The third and fourth phases would entail the acquisition of new ROW from outside the Hayti town limits to the Port's facility on the banks of the Mississippi River. Phases 3 and 4 would be approximately 14,300 feet in length.

As mentioned above, the Port Authority began the reconstruction associated with Phases 1 and 2 in 1997 without realizing that prior Board authorization was required. The Port Authority

suspended construction activities when notified of this oversight. The Port Authority contacted the Board and filed a petition for the necessary review and approval for all four phases. Phases 3 and 4 of the project would be undertaken if Board approval is obtained.

# ES 4.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES CONSIDERED

#### ES 4.1 PROPOSED ACTION

The proposed action is the construction of a rail line on existing and new right-of-way from the BNSF track in Hayti, MO, to the Pemiscot County Port Authority site for the purpose of providing rail service to existing and future businesses associated at the port. The proposed action includes rail operations on the proposed line. The rail line would be used to move a variety of goods including fiberglass material, grain, and fertilizer. The proposed action also represents the Port Authority's preferred alternative.

# **ES 4.1.1 Construction**

The proposed action begins at MP 212.32 in Hayti where it veers to the east from BNSF's north-south main line between St. Louis, MO, and Birmingham, AL, via Memphis, TN. From there, the Port Authority re-laid track for about 2.25 miles over the former BN ROW intersecting the city of Hayti, and crossing eight streets at grade. The ROW through Hayti varies from 40 feet to 80 feet. Once outside the Hayti city limit, the reconstructed track on existing ROW traverses a new concrete triple culvert across the Main Ditch 6 – or Hayti Ditch as it is locally known – within Drainage District No. 6. From this point, the 14,300 feet of the line would be built across new, flat ROW crossing agricultural land with a ROW width of approximately 60 feet. The new ROW would cross one highway and one county road at grade. The rail line would go up a 1.25 percent grade, traverse the levee on the Mississippi River floodplain on the river's west bank and enter the Port's facility.

# ES 4.1.2 Operations

It is estimated that one train per day would run over the new rail line. Hours of operation would vary, but would generally coincide with the operational hours of the businesses located at the Port, which are generally 8 am to 6 pm. The adjacent BNSF branchline that runs from Hayti to Kennett, MO, is classified as a light rail and has an average running speed of 10 mph. It is anticipated that trains traveling through Hayti would generally maintain the same speed. Speeds outside of the town limits may be slightly higher – 15 to 25 mph. The length of trains would vary with commodity and seasonal shipping. Trains may comprise as few as 3 cars. As the Port and associated businesses expand, the length of trains may grow. At this time, however, the Port Authority has not identified any contracts or commitments for new tenants at the Port that could generate additional rail traffic in the foreseeable future. Therefore, the potential environmental impacts addressed in this EA are limited to those associated with the existing tenants at the Port. The Port Authority would have a residual common carrier obligation on the rail line once it is constructed and anticipates contracting out operations to a short line railroad.

#### ES 4.2 NO-ACTION ALTERNATIVE

Under this alternative, the Port Authority would not construct the rail line from the BNSF line in Hayti, MO, to the port facilities. None of the potential environmental effects associated with rail construction and operation would occur. These include potential impacts to the levee, pedestrian and vehicular access in Hayti, agricultural land, and noise levels. Moreover, the two miles of track reconstructed by the Port Authority without Board approval would have to be removed. However, the benefits that the Port would obtain by creating rail access to its facility would also not be realized.

# ES 5.0 OVERVIEW OF THE EXISTING ENVIRONMENT AND ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

# ES 5.1 Transportation and Safety

Pemiscot County Port is located near the intersection of three major highways: U.S. Interstate 55, Interstate 155, and Missouri 84/U.S. Highway 412. The town of Hayti (population approximately 3,200) is composed of local residential streets and major and minor arterials.

The proposed action would cross local or area roads at 12 locations. No new grade separations are proposed to be constructed for this project. One grade separation would exist for the proposed action with the rail passing under the existing Interstate 55. The Missouri Department of Transportation (MoDOT) has suggested that the state roads in Hayti (Lee Street, Route J and Route 84) and the state roads in Pemiscot County (Route D and Route 84) would require gated and signalized crossings. The remaining local streets in Hayti would have non-signalized crossbucks. One gravel and dirt farm access road in Pemiscot County, beyond the city limits of Hayti, would also require a non-signalized cross-buck.

The alignment, configuration, and signalization of the rail crossings of the existing streets is coordinated by MoDOT's Railroad Safety Section. The Railroad Safety Section has jurisdiction over the construction, modification, or removal of public highway-rail crossings in Missouri. It also regulates railroad activities such as operating practices, track safety, site obstructions at crossings, and crossing surface ride quality. The Port Authority would be required to submit a set of detailed plans of all crossings to the state and must obtain the state's approval prior to construction.

The Missouri Department of Transportation has conducted a preliminary review of safety enhancements to local roads crossed by the proposed rail line. The Missouri Department of Transportation has indicated that the state roads in Hayti (Lee Street, Route J and Route 84) and the state roads in Pemiscot County (Route D and Route 84) to be crossed by the proposed rail

line may require gated and signalized crossings. The remaining local streets in Hayti would have non-signalized cross-bucks. One gravel and dirt farm access road in Pemiscot County, beyond the city limits of Hayti, would also require a non-signalized cross-buck. In forthcoming discussions with the Port Authority, the Missouri Department of Transportation will determine the final safety enhancements that would be required at the twelve proposed road crossings.

To ensure that the implementation of the proposed action would not have any significant impacts on transportation or safety SEA recommends that the Board impose the following transportation mitigation measures should it approve the rail line construction proposal:

- The Port Authority shall submit detailed plans and specifications to the Missouri
  Department of Transportation for approval prior to construction.
- 2. The Port Authority shall coordinate at-grade crossing construction with the Missouri Department of Transportation and Pemiscot County in order to minimize traffic delay during crossing construction. The Port Authority shall use appropriate signs and barricades to control traffic during construction.
- 3. The Port Authority shall develop internal emergency response plans for construction to allow for agencies and individuals to be notified in case of an emergency. The Port Authority shall provide the emergency response plans to state and local entities.
- 4. As agreed to by the Port Authority, it shall install at its sole cost, active rail/highway grade warning devices consisting of pole and cantilever mast mounted flashing lights and gates, and roadway modifications (as needed) as instructed by the Missouri Department of Transportation.

5. The Port Authority shall enter into an agreement with the Missouri Department of Transportation that specifies the responsibility of each party concerning the maintenance and repair of equipment and crossings.

Phases 1 and 2 construction of the portion of the rail line in Hayti was nearly completed at the time the Port Authority was notified of the need to obtain Board approval. Construction of the new rail (i.e.; Phases 3 and 4) in Pemiscot County would occur over several months. The periodic closing of roads or traffic delays to the public would be limited to periods during construction.

Route D and Route 84 lane use restrictions or road closure would occur only for short times while the track is installed and adjustments or tie-ins are made to the existing roadway profile. Detour routes would be made available as necessary. The Port Authority would station equipment so that any total closures would be minimized, allowing the disturbed area to be quickly restored for passage by emergency vehicles. The extent of lane restrictions or road closures would be similar to that encountered by the public during routine highway maintenance or resurfacing projects.

Permission for, and scheduling of, lane restrictions, road closures, and detour approvals, would be obtained in coordination with the appropriate public transportation agency. The Port Authority would consider maintenance of emergency response capabilities and school bus schedules in planning and executing the necessary road work. The Port Authority or its designated contractor would be responsible for the cost of all permits, detours, coordination with local officials and agencies, and public notifications related to temporary lane restrictions or road closures.

The Port Authority projects that approximately one round trip train movement a day would occur, and the train would move at approximately 10 miles per hour in the corporate limits of Hayti. The light volume of train traffic expected at the at-grade crossings would consist of

through traffic, with potential stoppage for any significant length of time likely only in the unusual instance of a mechanical or other emergency situation.

MoDOT reports Average Annual Daily Traffic (AADT) counts on Highway 84 between Caruthersville and Hayti of 10,000 to 19,000 vehicles. State Highway J has an AADT of 1,540 vehicles. MoDOT suggests the installation of flashing lights and gates installed at the at-grade intersections of the proposed rail line and Highway 84 and Highway J. Traffic volumes along the streets in Hayti are typical of low-volume residential streets. Safety measures on the rail line crossing of local streets would consist of railroad crossing signs.

Delays at intersections are a function of the number of cars and trains traveling through the crossing, train speeds, and the number and types of tracks and road lanes. The proposed action is not expected to cause delays. The proposed one daily round trip train movement would result in movements through intersections twice a day.

MoDOT's Division of Motor Carrier and Railroad Safety indicates that they do not expect traffic delays due to the one round trip per day and the fact that there are no loading facilities between the Port Authority and the main line. The State of Missouri has regulations that prohibit the parking of trains in intersections or within 250 feet of an intersection. No train stoppages along the rail line are expected to occur. The Division of Motor Carrier and Railroad Safety is responsible for monitoring rail movements, traffic volumes, and intersection delays. If design thresholds are exceeded, options for improving traffic flow and safety can include such actions as upgrading crossing gates and lights, changing train speed limits, rerouting local road traffic, and upgrading one crossing while closing adjacent crossings, and constructing grade separations.

The crossing of local streets in Hayti by the rail line would not be expected to cause delays to emergency response vehicles. The Hayti Fire Department is located near the rail ROW in a new building at 101 Delta Lane, near Route J in Hayti.

Trains operating over the proposed line would not be involved with the transportation of hazardous materials. Any hazardous waste or materials generated in the normal course of construction, operation and maintenance activities would be stored and disposed of in accordance with applicable environmental laws.

The Port Authority would implement an inspection and maintenance program to minimize the potential for derailments. To ensure that the proper procedures are in place in the event of a spill, SEA recommends that the Port Authority develop a spill prevention and emergency response plan.

Air service in the project area is provided by Mid Continent Air and is located at Highway 84 East in Hayti. Mid Continent Air is north of the project area. The proposed action would not impeded present air operations or facility expansion.

# ES 5.2 Land Use and Recreation

The town of Hayti has a land use of mixed residential and commercial uses, with some light industry and warehousing. Retail uses are situated along major arteries (e.g.; I\_55, US 412, and MO84). The existing rail ROW in Hayti is adjacent to light industry and residential properties. The residential dwelling units are predominately small-lot single-family detached homes dating to the late 1940s through the 1960s.

Pemiscot County's land use is predominately agriculture, primarily consisting of row crop farming. There are also farming operations in the county that raise hogs, cattle and horses. The primary row crops raised in the County are cotton, rice, corn, soybeans, grain sorghum, bermuda sod, wheat, and melons. The existing land use in the area of the new ROW is predominately agricultural. The U.S. Department of Agriculture through the Natural Resources Conservation Service (NRCS) indicated that "important farmland" was within the proposed ROW.

Construction and operation of the proposed rail line would be expected to result in minimal impacts to current land use. Potential long-term impacts to existing land use would be limited to areas acquired for the rail line construction and operation activities. The typical width of the ROW along the proposed corridor is 50 feet through the incorporated areas of Hayti and 60 feet in the areas of new construction. The track and roadbed would be approximately 20.5 feet in width. These widths can vary slightly depending on the geometric configuration of the planned rail, spacing needs at intersections with roads, rail embankment and drainage facilities.

Based on the ROW requirements, approximately 46 acres of new ROW would be acquired for the proposed project. Of this total, approximately 43 acres are currently open field agriculture use.

An NRCS impact rating determined that the taking of farmland for use in the project would not result in adverse impacts to Prime and Unique Farmlands or Statewide and Local Important Farmlands.

The proposed action would not conflict with any existing comprehensive plan for the region, county, or cities in the project area. Based on an evaluation of the project area, it is unlikely that construction and operation of the proposed action would have significant impacts on land use.

Residential homes in Hayti are adjacent to the existing railroad ROW. The proposed action would not require the taking of any residential homes or property. The proposed action also does not conflict with any known proposed residential development and would not impinge any future development adjacent to the rail line.

Although the proposed action would create a visual impact within Hayti and the rural region of the project area, the rail line ROW would not traverse any historic district or recreation areas in Hayti. Visual impacts would not be expected to be significant in Hayti or in the rural portion of the project area. There are no recreation resources in the project area that would be impacted by the proposed action.

#### **ES 5.3 Socioeconomics**

Farming and commerce and industry related to farming continue to be the main enterprises in Pemiscot County. Cotton gins, compresses, grain elevators, an alfalfa mill, a packing plant, and numerous related businesses operate in the county. Industrial enterprises not closely related to farming include a shoe factory, a stainless steel products plant, garment factories, a box company, a sand and gravel company, a veneer company, and a recently established shipbuilding industry.

The economy of the seven-county Bootheel Region in southeast Missouri generally lags behind the economy of the State of Missouri. Notably, the eastern part of the Bootheel and Pemiscot County have struggled to maintain strong economies. The poverty rate in the Bootheel is 20.4 percent, which is the highest rate among the state's regions. Missouri as a whole has a poverty rate of 11.8 percent.

The 2001 unemployment rate was 4.7 percent for the state, 7.2 percent for the Bootheel Region, and 9.4 percent for Pemiscot County. Per capita income in Pemiscot County was \$19,355 in 2000, compared to \$27,271 in the state for the same time period.

Potential socioeconomic impacts related to the construction and operation of the proposed rail line would be expected to be minimal. No new direct permanent employment would be expected as a result of the project construction. The Port Authority states that, if the Board approves its proposal, it intends to construct the rail line using private contractors for grading, bridge construction, track construction and railway signal installation. Approximately 20 to 30 contractor-directed employees could be expected to work on the proposed line, drawn primarily from local and regional organized labor pools. No short-term housing in the area of the project would be required. Contractors hired by the Port Authority would also operate and maintain the

proposed line. No long-term negative impacts to the local or regional economy would be anticipated.

No residential or commercial displacements would be caused by the proposed action. No impacts to community services are anticipated as there would be no taking of community facilities and no interruption of services provided by these facilities. The proposed action would have an impact to patterns of community interaction in Hayti. The rail line would modify neighborhood interactions where the proposed line intersects the existing road network. These impacts, while adverse, are expected to be minor as a result of the anticipated one round trip per day expected on the rail line.

No significant adverse impacts on the area's economic development are expected to occur as a direct result of the construction and operation of the proposed action. Additionally, the proposed rail line would not interrupt or displace any public services. Emergency vehicle access is not expected to be impacted. The proposed action would also have no impact on recreational activities or uses in the Pemiscot County project area.

# ES 5.4 Geology

Pemiscot County agricultural productivity is due in great part to the favorable soil conditions in the County. The soils in the Bootheel region were formed in Mississippi River alluvium and are relatively young. Parent material consists of varying amounts of glacial drift, loess, and weathered rock.

The construction of the proposed rail line would result in a modification of the area topography. The Port Authority intends to construct the rail line on top of a rail bed that would be raised above the 100-year floodplain for the entire length of the new construction ROW. The proposed ROW would be graded and filled, as needed, to prepare the sub-grade. Above the sub-grade the sub-ballast would be constructed. The sub-ballast would then support the ballast, rail ties, and track. On average, the track would be 2 to 4 feet above the existing ground elevation. Drainage

ditches would be constructed on either side of the rail bed, a minimum of one-foot below the existing ground elevation. The Port Authority and its construction contractors would abide by generally accepted industry construction practices to add fill and stabilize slopes. No blasting would be expected during the construction of the rail bed.

The construction of the new rail bed would require the placement of fill in order to build the rail bed above the present elevation. There would also be a need to place fill on either side of the levee for the rail line crossing of the levee. The total amount of fill and the source of the fill material has not yet been determined. Fill would likely come from a local source and be trucked to the construction site. Excavated construction material would likely be used as fill, as applicable. Upon completion of the construction project, all exposed soil slopes and surfaces would be vegetated as appropriate to create stable slopes.

SEA concludes that these construction activities would result in only minor changes to the local geology. Furthermore, the Port Authority would voluntarily ascribe to post-construction mitigation measures such as re-grading and re-vegetation to return the undeveloped areas to preconstruction conditions. SEA concludes that additional mitigation would not be warranted.

# **ES 5.5 Biological Resources**

The proposed rail line would follow an existing ROW through Hayti, then traverse open agricultural fields before crossing the levee into the port. The majority of the line to be constructed on new ROW would be situated on land previously disturbed by farming, tree harvesting, and general development.

The U.S. Fish & Wildlife Service and the Missouri Department of Conservation indicated in correspondence that the project area contains no Federally-listed species, designated critical habitats, or sensitive species or communities. In addition, there are no wildlife sanctuaries, refuges, or national or state parks located in the vicinity of the proposed rail line. SEA does not

anticipate that the proposed action would adversely impact terrestrial or aquatic wildlife in the project area.

Construction of the rail line could temporarily displace local small terrestrial wildlife associated with open fields and agricultural lands. However, such disturbances would be expected to be temporary and would not result in any major redistribution of resident species.

It is not anticipated that construction and operation of the rail line would require the clearing of any natural vegetation within the ROW for the rail bed and track. Rail construction and operations would not destroy or adversely impact any unique or protected habitat.

#### ES 5.6 Water Resources

#### ES 5.6.1 Surface Water

The proposed rail line would cross two streams: the Main Ditch 6 (or the "Hayti Ditch" as it is locally known); and the smaller Drainage Ditch 6. A triple-box culvert has been constructed for the crossing of the Hayti Ditch. The U.S. Army Corps of Engineers (Corps) issued a Nationwide Permit No. 3 on June 3, 1998, for this activity. A double 72-inch reinforced concrete pipe is proposed for the rail line crossing of Drainage Ditch 6. The Corps has indicated that a Nationwide Permit No. 14 would be needed for the crossing of this ditch. While the Nationwide Permit does not typically require mitigation, some bank stabilization may be required for the placement of the concrete pipe.

Construction of the proposed rail line would not be expected to impact more than 1.0 acre of waters of the U.S. or jurisdictional wetlands. No individual wetland permits would need to be obtained.

The waterway structure that crosses the Hayti Ditch has resulted in some minor alteration to the watercourse bed, possible loss of aquatic and riparian habitats through the enclosure of

waterways, and possible loss of embankments through the use of rip-rap, concrete, or other bank stabilization measures. These impacts are not expected to be adverse or long-term and therefore do not require mitigation.

Construction of the rail line over Drainage Ditch 6 would result in some minor alternation to the watercourse bed of this small and shallow drainage ditch. Any impacts that occur are not expected to be adverse and are expected to require minimum, if any, mitigation.

Surface waters could potentially be impacted by construction impacts. The Missouri Department of Natural Resources, Water Pollution Control Program, requires that a General Permit for Land Disturbance be obtained prior to construction. This general permit provides assurances that land disturbed during construction is restablized and returned to existing conditions as soon as possible after construction.

Surface waters could also be potentially impacted if a spill occurred during operation of the proposed action. The potential for spills is considered to be minimal. The assigned rail line operators would be required to implement inspection and maintenance programs to minimize the potential for derailments. To ensure that proper procedures are in place in the event of a spill, SEA recommends that the Port Authority develop a spill prevention and emergency response plan.

The Missouri Department of Natural Resources, Water Pollution Control Program, requires that a storm water permit be obtained prior to construction of the rail line. The permit application provides the Water Pollution Control Program with information about the Best Management Practices that would be employed during construction. Construction of the rail line would include silt and sedimentation control such as silt fences and re-seeding of cleared areas, as needed. The preliminary plans and drawings for the proposed new construction show that the rail line would be built with drainage ditches on one of both sides of the line. These ditches, typically 1 foot below the existing ground elevation and 2 feet in width, would serve the purpose

of providing drainage away from the rail bed. As the proposed line approaches the levee, the preliminary plans call for an 8-foot wide flat bottom ditch to control runoff. It is not expected that the runoff from these ditches would result in any adverse impact to the receiving waters or adjacent land uses.

# ES 5.6.2 Floodplains

The project area is within the 100-year floodplain of the Mississippi River. The existing levee is maintained by the Corps. The St. Francis Levee District, which operates under the guidance of the Corps, is responsible for the daily maintenance of the levee.

Both the City of Caruthersville and Pemiscot County are participants in the National Flood Insurance Program. Any developments within the special flood hazard area must meet the requirements of the floodplain ordinances of both jurisdictions. The proposed project is not within the boundaries of a special flood hazard area. The railbed would be raised above the 100-year floodplain. Executive Order 11988, Floodplain Management and Farmers Home Administration Instruction 1940, directs agencies to identify critical actions that could impact floodplains and waterways. The proposed action would not be expected to represent a critical action and pose a greater-than-normal risk for flood-caused loss.

#### ES 5.6.3 Groundwater

Recharge to aquifers is not expected to be impeded because of the small amount of impervious surface associated with the rail line and the utilization of proper run-off design. No aquifers would be disturbed in the areas of excavation for the proposed rail line.

Groundwater quality could potentially be affected if a spill or contaminant release occurred during rail line construction or operation and the contaminants penetrated the aquifer. The likelihood of such a release, however, is extremely small due to proper containerization and handling and to the small quantities of fuels and oils that would be present during construction

and operation. To ensure that proper procedures are in place in the event of a spill, SEA recommends that the Port Authority develop a spill prevention and emergency response plan.

# ES 5.7 Air Quality

Current sources of emissions in Pemiscot County include vehicles, light industries, locomotives, electric generating plants, a tire manufacturing plant and natural gas transmission operations. Current sources of emissions in or near the project area include vehicles, light industries, and locomotives.

EPA indicates that Pemiscot County is in attainment for each National Ambient Air Quality Standards pollutant. The county, therefore, is not subject to the additional regulatory air quality controls required for areas of poor air quality.

The construction phase of the proposed rail line could temporarily affect air quality in the immediate project area. Land grading and transportation of fill material from borrow areas could result in a temporary increase in fugitive dust emissions. Any open burning of debris and any vegetation that would be removed could contribute to temporary increases in particulate matter, nitrogen oxides, volatile organic compounds, and carbon monoxide emissions. To minimize impact from the potential release of pollutants, the Port Authority and its contractors would apply standard construction mitigation measures (best management practices) to reduce fugitive dust emissions during construction activities.

Air emissions related to temporary construction activities would be expected to result in minor concentrations of pollutants associated with heavy machinery and truck activities. These activities would be unlikely to result in significant adverse effects on air quality due to their limited and temporary nature, and the fact that they would occur in open and unpopulated areas away from residents, schools, and businesses.

The Port Authority has stated that train travel over the proposed line would be approximately one round trip per day. This level of activity is well below the threshold applied by the Board to determine the need for quantifying air quality impacts generated by a proposed rail line. Air quality impacts from the trains routed over the proposed rail line would be expected to be minimal. Construction and operation of the rail line would be expected to result in a decrease in the use of diesel trucks previously servicing the port. Reductions in the amount of diesel fuel – and diesel emissions – would be expected to result in some decreases in truck emissions.

In April 1998, EPA promulgated air emission standards for locomotives. The standards identify nitrogen oxides, hydrocarbons, carbon monoxide and particulate matter as compounds emitted by locomotives that are of potential concern to air quality. The EPA standards establish manufacturing requirements for new or rebuilt locomotive engines to control emissions during locomotive operations. Locomotives operated by the Port Authority or its contractors would be subject to the EPA air emission standards.

The proposed action would not result in adverse impacts on air quality.

# ES 5.8 Noise

The existing noise environment for the Pemiscot County project area reflects a variety of land uses consisting primarily of residential, commercial, and light industrial uses in the incorporated limits of Hayti, and cultivated agricultural fields from Hayti to the Mississippi River levee, near Caruthersville. The town of Hayti is served by a network of local neighborhood streets that contain a mixture of trucks and passenger vehicles. Ambient noise levels in the neighborhoods near the proposed rail line reflect a fairly quiet residential environment. South and east of MO 84 the land use changes to a steady mixture of residential, commercial, and light industrial. Noise levels in this area are higher and punctuated by higher traffic volumes, heavy truck braking and shifting, and machinery associated with light industry.

The noise environment beyond the corporate limits of Hayti is characterized by a reduction in noise-generating sources. The land use is predominately agricultural. Some noise associated with farm activities is audible, but the noise environment is fairly pristine. In the vicinity of the proposed crossing of Missouri Route 84 near the Port entrance the noise levels increase in proximity to the highway. Noise in this area is generated by traffic, most noticeably by heavy trucks.

The Board applies a threshold level of rail traffic increase in determining whether to quantify noise that would be generated by rail traffic over a new rail line proposed for construction and operation. This threshold is contained at 49 CFR 1105.7 (e)(6). If a proposed action would add eight or more trains per day to a line to be constructed, noise to be generated by operations over the line must trains per day to a line to be constructed, noise to be generated by operations over the line must be quantified and sensitive receptors (e.g., residences) would need to be identified.

Projected train operations over the proposed rail line would fall substantially short of the threshold described above. Therefore, SEA has not quantified the potential increase in noise levels due to operations. However, as discussed below, trains operations would increase ambient noise levels in the immediate vicinity of the line.

In Hayti, the proposed rail line would operate near residential areas including approximately six single-family detached residential homes located within 50 feet of the center line of the proposed rail line. Residents within these homes would experience adverse impacts from wayside noise and locomotive horns.<sup>1</sup> However, the limited train operations that are proposed by the Port Authority would include only one round trip train per day and trains that consist of as few as three cars. This low level of train operations would limit the frequency and duration of train

<sup>&</sup>lt;sup>1</sup>Wayside noise refers collectively to all train-related operational noise adjacent to the right-of-way, excluding horn noise. Wayside noise can result from steel train wheels contacting steel rails and from locomotive exhaust and engine noise. The amount of noise created by wheels on the rails is dependent on the train speed, while the amount of noise created by the locomotive is dependent on the throttle setting. Horn noise occurs in the vicinity of road/rail at-grade crossings to warn motorists and pedestrians of approaching trains.

noise, respectively. Trains within Hayti would also travel at speeds of approximately 10 mph, which would further limit a portion of the amount of wayside noise.

Train speeds could increase up to 25 mph outside the corporate limits of Hayti. However, the land use outside of Hayti is rural and adverse noise impacts would not be expected.

The Federal Railroad Administration (FRA) has issued a proposed rule covering the sounding of locomotive horns at highway-rail grade crossings. The proposed rule would implement a statutory requirement that locomotive horns sound at each highway-rail grade crossing unless certain exceptions are met. The proposed rule describes Supplementary Safety Measures that a community may use to establish a quiet zone within which locomotive horns would not be sounded. The rule would also establish an upper limit for the loudness of train horns. The proposed rule will not be effective until FRA completes its review of the regulation.

The FRA has established a set of noise standards for the operation of locomotives that are applicable to those that would operate over the Pemiscot line (49 CFR §210.29). These Federal regulations set upper limits on wayside noise levels produced by locomotives. The standards limit the decibel level of the noise produced by each locomotive. The Port Authority or its contractors would be required to operate in compliance with the FRA locomotive noise standards.

# ES 5.9 Hazardous Waste and Transportation of Hazardous Material

SEA consulted with EPA to identify any known hazardous waste sites in the vicinity of the proposed action. Correspondence with the EPA indicated that no known sites containing hazardous materials were in the Pemiscot project area. The proposed action would neither disturb nor generate hazardous wastes during construction or operation. No hazardous waste is expected to be carried on the line.

#### ES 5.10 Cultural Resources

Cultural resource investigations in the project area consisted of consultations with the State Historic Preservation Officer (SHPO), background literature research, surface collecting of artifacts, and systematic shovel testing in eight areas deemed testable using accepted professional criteria to identify and provide a preliminary assessment of the cultural resources located within the proposed rail line right-of-way. One historic site was recorded during the field survey. A preliminary evaluation of this site was performed against the National Register of Historic Places (NRHP) criteria of significance (36CFR60.6 Federal Register 1976).

The site identified during the Phase I survey work appears to represent a discard/disposal area dating to the early twentieth century. In view of the overall paucity of material at the site, the lack of potential for subsurface features, and its relatively recent age, the site does not appear to meet the NRHP criteria of significance and, consequently, is evaluated as not eligible for listing to the NRHP. It appears that the proposed construction and operation activities would not impact significant cultural deposits at this one site. No further archaeological investigation of the site was recommended.

Consultation with the SHPO revealed the presence of three National Register eligible sites in the project area; Drainage Ditch 6, the Main Line Levee, and 1921 Hayti Water Plant building. The SHPO indicated in correspondence dated October 10, 2002, that the proposed rail line would have "no adverse effect" on the fabric of these properties. The resources were photographed and the prints submitted to the SHPO per the specifications set forth in their correspondence.

# **ES 5.11 Environmental Justice**

SEA prepares environmental documents following the guidance presented in Executive Order 12898 - "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." This Executive Order directs Federal agencies to analyze the environmental effects of their actions on minority and low-income communities.

The President's Council on Environmental Quality guidance explains that a minority or low-income population may be present if the minority or low-income population percentage of the affected area is "meaningfully greater" than the minority or low-income population percentage in the general population or other appropriate unit of geographic analysis. SEA uses the term "meaningfully greater" to be greater than 50 percent or more than 10 percent above the average. In order to determine whether the proposed action would have a disproportionately high and adverse effect on a minority or low-income population, data was first gathered comparing the populations in communities adjacent to the existing right-of-way in Hayti.

Pemiscot County had a total 2000 Census population of 20,047. Of these, 5,259 were identified in the Census as Black. This number represents a 6 percent reduction in the black population from the 1990 Census that identified 5,597 black persons. The town of Hayti has a disproportionately high number of blacks within the town limits – 1,403 blacks and 1,753 whites – compared to the rest of the County.

The 2000 Census data was reviewed to identify the census blocks adjacent to the existing rail right-of-way in Hayti. The ROW associated with the proposed new construction traverses open agricultural fields with no adjacent population. A total of 20 census blocks were identified in Hayti along the existing rail line. The Year 2000 population data in these census blocks represents an approximately 2:1, white to black population ratio.

SEA's review of the demographic characteristics of Pemiscot County did not identify any populations in the project area that would meet the criteria for low-income or minority populations. Based on this review, construction and operation of the proposed rail line would have neither a disproportionately high nor adverse environmental impact on minority or low-income communities. Therefore, no environmental justice impacts would occur. No further assessment of potential environmental justice impacts is required for the proposed project.

# ES 5.12 Energy and Recyclable Commodities

Consistent with Board regulations, SEA evaluated the potential for the proposed rail line to affect the movement of energy resources and recyclable commodities. The proposed action would affect the movement of energy resources in Missouri. The proposed action would not affect the movement of recyclable commodities. The Port Authority presently transports materials and goods to and from the port in trucks and barges. Construction and operation of the proposed rail line would allow unit trains to provide for the movement of many of these goods and materials. It is anticipated that the project would likely derive energy benefits from the reduction in truck trips required to service the port.

# ES 5.13 Cumulative Effects

Consultation with local officials and planning groups did not reveal any other planned project in the vicinity of the Port Authority's proposed action. The Port Authority anticipates that the rail line would aid in the development and growth of port facilities. However, no expansion of the Port or Port-related businesses is currently proposed, planned, or underway.

# ES 6.0 AGENCY CONSULTATION, MITIGATION, AND CONCLUSIONS

Based on the information available to date, consultations with appropriate agencies, and extensive environmental analysis, SEA developed preliminary environmental mitigation measures to address the environmental impacts of the proposed construction and operation of the rail line in Pemiscot County.

SEA emphasizes that the recommended environmental mitigation measures in the EA are preliminary and it invites public and agency comments on these proposed environmental mitigation measures. In order for SEA to effectively assess the comments, it is helpful if the public is specific regarding desired mitigation and the reasons for it.

SEA reviewed all information available to date and completed its independent analysis of the construction and operation of the proposed rail line, all the comments and mitigation requested

by various Federal, state, and local agencies, as well as other concerned parties. Based on the

information provided from all sources to date and its independent analysis, SEA preliminarily

concludes that construction and operation of the proposed rail line would have no significant

environmental impacts if the Board imposes and the Pemiscot County Port Authority implements

the recommended mitigation. Therefore, the Environmental Impact Statement (EIS) process is

unnecessary in this proceeding.

**ES 7.0 PUBLIC COMMENTS** 

SEA specifically invites comments on all aspects of this EA, including suggestions for additional

mitigation measures. SEA will consider all comments received in response to the EA in making

its final recommendations to the Board. The Board will consider the entire environmental

record, SEA's final recommendations, including final recommended mitigation measures, and

the environmental comments in making its final decision in this proceeding.

Comments (an original and 10 copies) should be sent to Surface Transportation Board, Case

Control Unit, 1925 K Street NW, Suite 500, Washington, DC 20423. The lower left hand corner

of the envelope should be marked: Attention: Mr. David Navecky, Environmental Comments,

Finance Docket No. 34117. Questions may also be directed to Mr. David Navecky at this

address or by telephoning (202) 565-1593 or by e-mailing naveckyd@stb.dot.gov.

Date made available to the public:

May 7, 2003

Comment due date:

June 6, 2003

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